

CLAIMS

1. A lens protection mechanism, comprising:
5 a rotating transparent disc; and
at least one counter rotating object whose rotation substantially cancels out angular momentum caused by the rotation of the disc.
2. A lens protection mechanism according to claim 1, wherein said at least one counter
10 rotating object supports said disc.
3. A lens protection mechanism according to claim 1, wherein said at least one counter rotating object applies rotational force to said disc.
- 15 4. A lens protection mechanism according to claim 1, wherein said at least one counter rotating object comprises at least one wheel and further comprising:
a rim on said transparent disc, engaged and supported by said at least one wheel; and
at least one motor, coupled to at least one of said at least one wheel to apply rotational
force to said disc.
- 20 5. A lens protection mechanism according to claim 4, wherein said at least one wheel comprises a plurality of wheels having substantially identical mechanical properties.
6. A lens protection mechanism according to claim 4, wherein said at least one wheel
25 comprises four wheels.
7. A lens protection mechanism according to claim 4, wherein said at least one motor is coupled to said at least one wheel using a rubber pin and wherein said at least one motor does not substantially support said wheel against said disc.
- 30 8. A lens protection mechanism according to claim 4, wherein said at least one wheel comprises a plurality of wheels arranged at substantially $\pm 45^\circ$ to expected movement axes of a lens for which the lens protection mechanism is adapted.

9. A lens protection mechanism according to claim 4, wherein said at least one motor is a DC motor; and further comprising:

a second DC motor coupled to a second wheel for simultaneously engaging said disc;

5 and

wiring that connects said DC motors in series to a power source, such that the voltage distribution between the motors reflects the instantaneous rotational speed of each motor.

10. A lens protection mechanism according to claim 4,

10 wherein said rim is removably snap-connecting said disc to said engaging wheel, such that said disc can be snapped off said engaging wheel by applying force to the disc.

11. A lens protection mechanism according to claim 10, wherein said rim is snap-connected onto said wheel.

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12. A lens protection mechanism according to claim 4, wherein said rim is resilient.

13. A lens protection mechanism according to claim 4, wherein at least some of the edges of said rim coupling the motor to said rotating transparent disc, are rounded.

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14. A lens protection mechanism according to claim 1, wherein said disc is a lens.

15. A lens protection mechanism according to claim 1, wherein said disc rotates at at least 2000 RPM.

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16. A lens protection mechanism according to claim 1, wherein said disc rotates fast enough to centrifugally move water drops off of said disc.